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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/683,613 | 01/24/2002 | Fred Christians | 3386.1 | 9358 |
| 22886 | 7590 | 04/28/2005 | EXAMINER | |
| AFFYMETRIX, INC | | | WILDER, CYNTHIA B | |
| ATTN: CHIEF IP COUNSEL, LEGAL DEPT. | | | ART UNIT | PAPER NUMBER |
| 3380 CENTRAL EXPRESSWAY | | | | |
| SANTA CLARA, CA 95051 | | | 1637 | |

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/683,613 | CHRISTIANS ET AL. | |
| | Examiner | Art Unit | |
| | Cynthia B. Wilder, Ph.D. | 1637 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 February 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-21 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

FINAL ACTION

1. Applicant's amendment filed February 14, 2004 is acknowledged and has been entered. Claims 1 and 12 have been amended. Claims 1-21 are pending. All of the arguments have been thoroughly reviewed and considered but are not found persuasive for the reasons discussed below. Any rejection not reiterated in this action has been withdrawn as being obviated by the amendment of the claims.

This action is made FINAL

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Previous Rejections

3. The claim rejection under 35 USC 112 second paragraph is withdrawn in view of Applicant's amendment of the claims. The prior art rejection under 35 USC 102 directed to claim 1 as being anticipated by Kuimelis et al is withdrawn in view of Applicant's amendment. The prior art rejection under 35 USC 103 directed to claims 1-21 as being obvious over Kuimelis et al in view of Gold et al and further in view of Fodor et al is maintained and discussed below. The prior art rejection under 35 USC 103 directed to claims 12-21 as being obvious over Baskerville et al in view of Fodor et al is maintained and discussed below.

Applicant's Traversal

4. Applicant's traverse the rejection under 35 USC 103(a) on the following grounds: Applicant summarizes the Examiner's rejection and states that the claims have been amended to recite supplying more tags than the target mRNAs to be tagged. Applicant states that the

amended claims are directed to a method of tagging peptides without using target specific tags. Applicant states that the cited references, individually or in combination, do not teach, suggest or motivates tagging peptides without using target specific tags. Applicant reference the rejection of claims under 103(a) is obviated. Applicant concludes that the pending claims as amended are now in condition for allowance.

Examiner's Response

5. All of the arguments filed on February 14, 2005 have been fully reviewed and considered but they are not found persuasive for the reasons that follows: In regards to Applicant arguments that the references, Kuimelis et al in view of Gold et al in view of Fodor et al, do not teach "supplying more tags than the target mRNAs to be tagged", it is firstly noted that the claims as amended recites "supplying more tags than the plurality of polypeptides to be tagged" not "target mRNAs to be tagged". Nonetheless, the references of Kuimelis et al in view of Gold et al in view of Fodor et al meet the limitations of the claims as amended. Kuimelis et al teach wherein using a "population of tags which differ in sequence from one another such that each target has a unique binding partner under the conditions employed". Kuimelis et al teach the term "population" means more than one molecule. (See page 6). Kuimelis et al does not provide a limit on the number of tags that may be employed in the method and hence the term "population" may encompass any number of tags.

Gold et al teach a collection of mRNA which complexes with a plurality of polypeptides, wherein each mRNA comprises a tag not being uniquely assigned to the polypeptides, but bound to the mRNA (page 42). Gold et al teaches wherein more nucleic acids which complexes with

the plurality of polypeptides are provided. Specifically, Gold et al states that "it will generally be preferred that "the test mixture contain as large a number of possible sequence variants as is practical for selection, to insure that a maximum number of potential amino acid sequences of the translated polypeptide are identified". Gold et al states that "a randomized sequence of 60 nucleotides will contain a calculated 10^{36} different candidate nucleic acids sequence would encode 10^{26} possible decapeptides". Gold states "as a practical matter, it is possible to sample only about 10^{18} polypeptides candidates in a single selection" (see page 27). Since Gold et al teaches that more nucleic acid sequences are utilized in the linking process and that each nucleic acid sequence may contain a nucleic acid tag, it clear from the teachings of Gold et al that more tags may be supplied in the method than polypeptides.

In regards to Applicant's arguments concerning the 103 rejection of Baskerville et al in view of Fodor, the examiner disagrees that the references do not teach the limitation of supplying more tags than plurality of polypeptides. The reference of Baskerville et al, in contrast, teaches that "because there is *no limit* on the *number of different possible nucleic acids*, an essentially unlimited number of different (uniquely or specifically) tagged polypeptides can be produced and once produced, the tagged polypeptides can be analyzed via hybridization to DNA arrays (page 23, line 21 to col. 24, line 15 and page 26, line 4 to page 27, line 7; see also page 25, lines 16-30 and Fig. 3). Hence, the references place no limit on the use of tags in the method. Applicant's arguments are not sufficient to overcome the prior art rejections under 35 USC 103(a). Accordingly, the rejections under 35 USC 103(a) are maintained.

Conclusion

6. No claims are allowed. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia B. Wilder, Ph.D. whose telephone number is (571) 272-0791. The examiner works a flexible schedule and can be reached by phone and voice mail. Alternatively, a request for a return telephone call may be emailed to cynthia.wilder@uspto.gov. Since email communications may not be secure, it is suggested that information in such request be limited to name, phone number, and the best time to return the call.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571) 272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.


KENNETH R. HORLICK, PH.D
PRIMARY EXAMINER

4/25/05